



View from the Beltway

Cryptocurrency's Future

BY OWEN ULLMANN

The next big thing or a repeat of the Dutch tulip craze?

Any doubt that the cryptocurrency phenomenon has become mainstream should have been dispelled on Christmas Day, 2021. That's when Staples Center, the Los Angeles sports arena named for a company that sells relics from a past era—paper products—changed its name to Crypto.com Arena after a Singapore-based company that did not exist until 2016. Crypto.com, a cryptocurrency exchange app, paid an astounding \$700 million for the naming rights over the next twenty years, and is running television commercials featuring actor Matt Damon spouting the Latin proverb, "Fortune favors the brave."

It is just as true that fortune eludes the foolish. And it's a valid debate about which will prove to be the case. Based on the investment frenzy over private digital currency, we are witnessing either

the next really big thing, as Twitter founder Jack Dorsey and Facebook CEO Mark Zuckerberg predict, or a repeat of the seventeenth-century Dutch tulip craze, as legendary in-

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investor Warren Buffet contends. Of course, the tulip bubble burst within a few years, while crypto mania has lasted for more than a decade and is getting only stronger. Just witness all the crypto commercials during the Super Bowl—Larry David's faux dismissal of the crypto craze in one tongue-in-cheek ad notwithstanding.

Since 2009, when Bitcoin first appeared as a decentralized digital currency meant to serve as a payment system, the value of a single digital "token" has exploded

from a minuscule fraction of a cent to a high of nearly \$69,000 in November 2021 before ending the year at \$46,300, a drop that highlights its volatility—it has been known to soar or plunge 10 percent in just a few hours. Indeed, in late January 2022, as the stock market swooned, Bitcoin plummeted to below \$35,000 before recovering somewhat. Although Bitcoin is still used to pay for goods or services—El Salvador adopted Bitcoin as legal tender last October—it increasingly is being acquired as an investment in a commodity, such as gold. Unlike traditional commodities, however, it has no physical properties, existing only as a computer algorithm.

Owen Ullmann is TIE's executive editor and author of Empathy Economics, a biography of Treasury Secretary Janet Yellen to be published in 2022.

Despite wild swings in prices, investors—apparently heeding Matt Damon’s advice—have not been deterred from plowing mindboggling amounts of money into Bitcoin and the more than ten thousand other digi-

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tal currencies it has spawned. The total market cap of these currencies at one point in 2021 approached \$3 trillion, roughly equal to the market cap of Apple or Microsoft, though the crypto market cap had plunged in half during

January’s massive selloff. TripleA, a crypto exchange company, estimates there are more than 300 million investors worldwide. A November 2021 survey by the Pew Research Center found that 16 percent of Americans have used or traded cryptocurrencies, including 43 percent of men between the ages of 18 and 29.

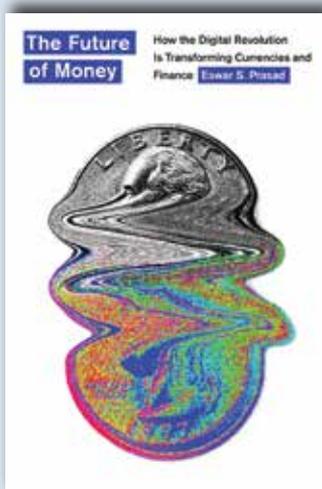
Clearly, the crypto market can no longer be ignored or viewed as a niche investment, which is why governments around the world have become so nervous. And for good reason. A major appeal of cryptocurrencies like Bitcoin is that it is a decentralized system independent of governments or traditional financial intermediaries such as commercial banks. Traders can remain anonymous and transactions are verified through a revolutionary software

system pioneered by Bitcoin that is known as a “blockchain.”

Essentially, a blockchain is a public ledger of transactions that can be viewed by anyone who downloads the open-source software and connects to a network of computers that confirms the date, amount, and user IDs of every transaction. Bitcoins are awarded to the first computer that is acknowledged by the network to have verified a series—or “block”—of transactions that are added to the public ledger—or “chain.” This is called “mining,” which can be very rewarding given the current price of Bitcoin, but it also is very time-consuming and uses an enormous amount of energy. Elon Musk had been a big Bitcoin booster but has soured on it because of the energy drain. Bill Gates is a detractor for the same reason. Nonetheless, the technology so far has proven to be impervious to hacks, so the transactions are irreversible and permanent for all to see. That is why an intermediary is not required to verify ownership and values.

The idea of a trustworthy, low-cost system with anonymous users beyond the control or peering eyes of governments lures those distrustful of authority or policies that inflate the value of national currencies. But those are the same reasons the system draws criminal elements, such as money launderers and ransomware hackers who cripple computer systems and demand millions in cryptocurrency to remove the damaging viruses they planted.

Many investors still are willing to pay a fee to use intermediaries as a convenience because there are some clear disadvantages to using a decentralized system. One is the length of time it takes a decentralized network of computers to confirm a transaction, a risk when trading something so volatile. There’s also the problem of keeping a user’s “key” in a safe place so no one else can access the account. Bitcoin



The Future of Money: How the Digital Revolution Is Transforming Currencies and Finance by Eswar Prasad (Belknap Press, 2021).

Banks Beware

“There is potential for improving international payment systems. Right now, international payments are beset by a variety of impediments in terms of cost, the speed with which transactions can be executed, and the inability to track those transactions in real time. Private stablecoins could make cross-border payments much more efficient. One could imagine CBDC (central bank digital currency) maturing into that role, as well, although many countries issuing CBDC are talking now about only domestic objectives.

“Commercial banks are going to face a lot more competition in some areas, especially international payments, where multinational banks now collect very significant fees. If CBDC were to take the form of accounts at a central bank, you could see the risk of commercial bank deposits flowing to the central banks. So, it’s going to be a very challenging environment for commercial banks.”

—E. Prasad

issues a key composed of 64 numbers and letters in random order, and there have been many publicized cases of Bitcoin owners who have lost fortunes worth as much as \$500 million because they lost their keys and have no other way to access their account.

The crypto market has addressed the volatility problem by issuing “stablecoins” that are pegged to an asset such as a national currency, a com-

Cybercurrency has become the latest speculative gamble among major players. Studies found that ten thousand investors owned one-third of all digital currency, and that transactions of more than \$10 million accounted for more than 60 percent of trades in the spring of 2021.

modity, or other cryptocurrency. The idea is to make it a viable medium of exchange by reducing wild price swings, though stablecoins pegged to a national currency seem to undercut the original attraction of a currency disconnected from any government. This market, barely five years old, has taken off, with dozens of companies sprouting up with a combined market cap that has rocketed above \$100 billion in the past year. It also has gotten a lot of attention from the U.S. government, which—no surprise—wants congressional authority to regulate it.

A November 2021 report by the President’s Working Group on Financial Markets, which includes the Treasury Department and the FDIC, concluded that stablecoins “could support faster, more efficient, and more inclusive payments options” but only if well-designed and “appropriately regulated.” The report cited risks such as volatility from speculative trading,

a lack of transparency, fraud that includes market manipulation and insider trading, increased criminal activity, and threats to the broader financial system because of complex trades and significant amounts of leverage that could cause a crisis if prices crash and there is a run on under-capitalized crypto brokers.

Federal regulators feel they were burned by failing to regulate the ballooning over-the-counter derivatives market, which came under federal supervision only after derivatives contributed to the 2007–2009 market crash. The financial regulators don’t want to make the same mistake again and have asked Congress for authority to regulate issuers of stablecoins as if they are banks or other financial institutions that must meet capital requirements.

At the same time, crypto traders face new reporting requirements under the infrastructure bill President Biden signed into law in November 2021. Such moves to increase transparency and allow the government’s nose under the tent may well cause cryptocurrencies to lose some of their luster with users.

The crypto market also is facing competition from national governments, which are taking steps to is-

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sue their own digital currencies. The Bahamas and Nigeria already have adopted such currencies. Last fall, China banned all private crypto transactions and is rushing to develop its own digital currency. No surprise there since the communist government won’t tolerate any market it can’t control.

Now it is rushing to develop its own replacement for traditional currency. The U.S. Federal Reserve is studying the issue but moving more cautious-

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ly. On March 9 of this year, President Biden issued an executive order authorizing the U.S. government to formulate a plan for issuance of a digital currency.

Digital currencies backed by central banks offer the prospect of fast and verifiable transactions and low costs, particularly for all those consumers who don’t have bank accounts. There are an estimated fourteen million in the United States who don’t use banks, and they would reap significant savings if they could transfer money cheaply without paying hefty fees charged by companies such as Western Union to wire money or cash paychecks.

“If a central bank issues a digital currency, the user case for the stablecoin will be much weaker,” said Eswar S. Prasad, an economics professor at Cornell University and a senior fellow at the Brookings Institution. “About 5 percent of households in the United States are either unbanked or underbanked, according to the FDIC. This means that there is potential for improving domestic payment systems.”

“Even more importantly, there is potential for improving international payment systems,” added Prasad, author of a new book, *The Future of Money: How the Digital Revolution Is Transforming Currencies and Finance*. “Right now, international payments are beset by a variety of impediments in terms of cost, the speed with which transactions can be executed, and the inability to track those transactions in real time. Private stablecoins could make cross-border

payments much more efficient. One could imagine CBDC (central bank digital currency) maturing into that role, as well, although many countries issuing CBDC are talking now about only domestic objectives.”

Giant companies with huge commercial platforms and followings, such as Amazon, Apple, and Facebook, are logical candidates for issuing their own digital currencies to streamline payments anywhere in the world and offer the anonymity many users prefer. So far, the U.S. government has blocked Facebook’s plans to do so for reasons ranging from loss of control over the financial system to the fear of a spike in illicit activity. Facebook, now called Meta Platforms, decided in January to wind down its crypto payments development program and sell its technology to a California bank.

Prasad said China, Japan, and Sweden have already initiated CBDC experiments, and a number of other central banks in Asia, Europe, and Latin America—including India and Russia—have indicated they will begin CBDC experiments within the next twelve to eighteen months. “Commercial banks are going to face a lot more competition in some areas, es-

The crypto trend is a huge challenge for government regulators.

pecially international payments, where multinational banks now collect very significant fees,” he said. “If a CBDC were to take the form of accounts at a central bank, you could see the risk of commercial bank deposits flowing to the central banks. So, it’s going to be a very challenging environment for commercial banks.”

And the future of the cryptocurrency that started it all? “Ironically, Bitcoin has become what it was not meant to

be: a pure speculative financial asset,” said Prasad. “It was created to be a medium of exchange designed to allow anonymous transactions without a trusted third party. But it’s not good at doing that.” He cited the time it takes to confirm transactions, the energy consumption, and the near total consumer interest in it solely as an investment.

Indeed, a *Washington Post* story in January backed up Prasad’s observation that cybercurrency has become the latest speculative gamble among major players. It cited studies that found that ten thousand investors owned one-third of all digital currency, and that transactions of more than \$10 million accounted for more than 60 percent of trades in the spring of 2021. By contrast, cybercurrency transactions for the exchange of goods and services were tiny.

The lasting genius of Bitcoin, he added, is its mindboggling technology that allows traders to conduct verifiable transactions without a third-party intermediary. “Even if it does not persist as a viable currency, the blockchain technology that it has bequeathed to us is really a marvel that is going to have some important implications in finance.”

Prasad envisions the expansion of blockchain technology for decentralized transactions ranging from home and car purchases to swapping financial assets, all without needing to rely on real estate agents, settlement attorneys, banks, or brokers because of the technology’s ability to provide secure and verifiable ownership. “Think of ownership records for houses and land all being posted on public blockchains,” he said.

The huge energy drain can be overcome by switching from a decentralized system that requires an entire network of computers to agree on the validity of transactions to centralized blockchains in which the validation of transactions is undertaken by a trusted

third party, such as a central bank. The transactions are still public but the energy usage is reduced since an army of computers aren’t needed. Ethereum, the second-largest cryptocurrency, is moving to a consensus protocol that would be more efficient and less environmentally destructive, Prasad said.

Within a decade, Prasad predicted, physical currency will become virtually extinct. Consumers will make

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digital payments via private payment agents or central banks. Digital versions of central bank currencies will become the norm at the retail level. And a parallel system of decentralized finance will become more important.

As for Bitcoin, which started it all, will it keep soaring or plummet in value? “I think it’s more likely that it’ll have little value, but who knows?” laughed Prasad. “Bitcoin should not have the value it now has, but all you need is investors’ faith to keep the speculative bubble growing for a long time.”

The crypto trend is a huge challenge for government regulators to get their heads around as they study this new realm of finance. Clearly some government oversight is needed to guard against fraud, other criminal activity, and reckless investment activity that could result in the kind of financial crash that occurred fourteen years ago from regulators’ reticence to curb irresponsible derivative plays before it was too late. A little prudent oversight now rather than overkill in the future seems the way to proceed to ensure that cryptocurrency ushers in a new, improved system of finance and doesn’t fade as just another flashy investment fad that went bad. ◆